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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,391	12/11/2003	Ken Gentile	A5GN2392US	9723
23935	7590	11/02/2005	EXAMINER	
KOPPEL, JACOBS, PATRICK & HEYBL 555 ST. CHARLES DRIVE SUITE 107 THOUSAND OAKS, CA 91360			COX, CASSANDRA F	
			ART UNIT	PAPER NUMBER
			2816	

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/734,391	Applicant(s) GENTILE, KEN	
	Examiner Cassandra Cox	Art Unit 2816	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-5, 17-20, 22-29 and 31 is/are allowed.
- 6) ☒ Claim(s) 1, 6-11 and 21 is/are rejected.
- 7) ☒ Claim(s) 13-16, 30 and 32 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08/05/05 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 is indefinite because the claim is misdescriptive. The adder (62) is not included in the phase controller, but is found outside of the phase controller (60). It is noted that applicant has attempted to correct this problem, however the claim remains indefinite. It is the suggestion of the examiner that adding the phrase "the signal generator" before the word "further" in line 7 of the claim would clear up the indefiniteness of the claim.

Correction or clarification is required.

Claims 7-11 are also rejected due to the limitations of the base claims and any intervening claims.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Staszewski et al. (U.S. Patent No. 6,414,555).

In reference to claim 1, Staszewski discloses in Figure 5 a signal generator, comprising: a synthesizer (508) that generates a synthesizer signal (f_{RF}) which has a synthesizer frequency that corresponds to a tuning word (522) and a clock signal (f_{CLK}); a frequency controller (520) that provides a controlled tuning word (518) whose corresponding synthesizer frequency is within a selected frequency error from the reference frequency of a reference signal (f_{REF}); and a phase controller (504,506,510,512) that alters the phase of the synthesizer signal (f_{RF}) to reduce a phase difference between the synthesizer signal (f_{RF}) and the reference signal (f_{REF}). The same applies to claim 21, see ABSTRACT.

Allowable Subject Matter

5. Claims 13-16, 30, and 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claims 2-5, 12, 17-20, 22-29 and 31 are allowed.

7. Claims 6-11 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter: Claim 13 would be allowable because the closest prior art of record fails to disclose a circuit as shown in Figure 1 wherein the synthesizer (30) is an accumulator in

combination with the rest of the limitations of the base claims and any intervening claims. Claims 14-15 would be allowable because the closest prior art of record fails to disclose a circuit as shown in Figure 3 wherein the circuit further includes a word converter (92) in combination with the rest of the limitations of the base claims and any intervening claims. Claims 16 and 32 would be allowable because the closest prior art of record fails to disclose a circuit as shown in Figure 3 wherein the circuit further includes a digital-to-analog converter (90) that converts the synthesizer signal into an analog signal in combination with the rest of the limitations of the base claims and any intervening claims. Claim 30 would be allowable because the closest prior art of record fails to disclose a circuit as shown in Figure 1 wherein the method includes recursively adding the tuning word at a rate of the clock signal (this is performed by adder 34 and latch 32) in combination with the rest of the limitations of the base claims and any intervening claims.

9. The following is an examiner's statement of reasons for allowance: Claims 2-5, 12, and 17 are allowed because the closest prior art of record fails to disclose a circuit as and 12 shown in Figure 1 wherein the frequency controller (40) includes at least one counter (43, 44) and a count processor (48) in combination with the rest of the limitations of the base claims and any intervening claims. Claims 6-11 would also be allowed for the reasons mentioned with respect to claims 2-5, if amended to overcome the 112 rejection. Claims 18-20 are allowed because the closest prior art of record fails to disclose a circuit as shown in Figure 1 wherein the signal generator includes synthesizer (44) and reference (43) counters in combination with the rest of the

limitations of the base claims and any intervening claims. Claims 22-29 and 31 are allowed because the closest prior art of record fails to disclose a circuit as shown in Figure 1 wherein the method includes the step of obtaining a difference count (which is seen to be performed by the differencer 46) in combination with the rest of the limitations of the base claims and any intervening claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cassandra Cox whose telephone number is 571-272-1741. The examiner can normally be reached on Monday-Thursday from 7:00 AM to 4:30 PM and on alternate Fridays from 7:30 AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

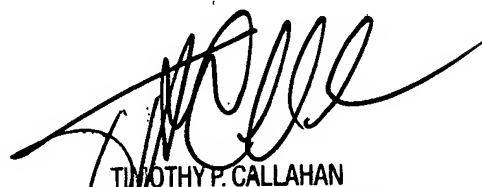
Art Unit: 2816

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CC

cc

October 29, 2005


TIMOTHY P. CALLAHAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800